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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|---|---|---|---|
| 10/525,245 | 02/22/2005 | Hideharu Tsuchiya | 122572 | 5379 |

25944 7590 09/15/2009

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| EXAMINER | |
|---|---|
| HENKEL, DANIELLE B | |

| ART UNIT | PAPER NUMBER |
|---|---|
| 1797 | |

| MAIL DATE | DELIVERY MODE |
|---|---|
| 09/15/2009 | PAPER |

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

| Office Action Summary | Application No. | Applicant(s) | |
|---|---|---|---|
| | 10/525,245 | TSUCHIYA, HIDEHARU | |
| | Examiner | Art Unit | |
| | DANIELLE HENKEL | 1797 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on *08 May 2009*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *22,23,27,28,36,37 and 41-53* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *22-23, 27-28, 36-37, and 41-53* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

## DETAILED ACTION

### *Response to Amendment*

1. The amendment filed May 8, 2009 has been entered and fully considered.

2. Claims 22-23, 27-28, 36-37, and 41-53 are pending.

### *Claim Rejections - 35 USC § 103*

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

5. Claims 22, 23, 27-28, 37, 42, 47, and 48 are rejected under 35 U.S.C. 103(a) as being unpatentable over BAKER (US 4301252) in view of KITAGAWA (US 4629862).

a. With respect to claim 22, BAKER teaches an upwardly extending cylindrical outer wall (12) on a base platform (11) with an observation hole (17) centrally of low inner wall (13) (at central portion) with a countersink (18) (container accommodating portion) that permits a conventional culture dish (19)

(specimen container) (Column 3, lines 9-19, Figure 1). BAKER teaches moisture soaked annular pads (15, 16) (water reservoir, water tank) are located in the channel between the outer and inner walls surrounding the culture dish (Column 3, lines 14-16, Figure 1). The incubator taught by BAKER also includes a transparent, cylindrical cover plate (25) (lid) that seals off the upper opening of the incubator (Column 3, lines 26-28, Figure 2). BAKER also teaches a thermal heating means (39) (heater) to provide suitable survival temperature in the incubator (Column 3, lines 57-68, Figure 1). The incubator of BAKER also includes a hollow fiber tube (30) (gas pipe) connected to a supply tube (32) (gas supply tube) that is connected externally to a supply hose (33) to feed gases into the incubator (Column 3, lines 36-47, Figure 1). The observation hole (17) (light transmitting portion of unit) located in the center of bottom platform (11) and the transparent cover plate (25) (light transmitting portion of lid) allow continuous observation of cell cultures using either an upright or inverted microscope (transmitting light rays upwardly or downwardly) (Column 2, lines 17-23). BAKER teaches an observation hole located in the center of bottom platform and a transparent (light ray transmitting) cover plate (lid) allow continuous observation of cell cultures using either an upright or inverted microscope (Column 2, lines 17-23). BAKER does not explicitly disclose the heater to be a plate type, having laminate plates, an upper plate or frame. However, KITAGAWA teaches a sample heater for use in microscopes in which an embodiment includes a heater plate with a through-hole (light ray transmitting portion) that allows an objective

lens of a microscope to be inserted into (corresponding to unit and lid) (Column 7, lines 65-66) in which a culture container is placed on the heater plate (heating container from bottom) (Column 8, lines 1-2). KITAGAWA also discloses the heater is a resistor (heating element) laminated in entirety (laminate upper and lower plates) (Column 11, lines 19-24). KITAGAWA also teaches an embodiment in which a top plate (inter-seat) is disposed above the upper plate with a space (see Figure 8) from the upper plate and a frame (rest with seat) for supporting the laminate and top plate (Column 10, lines 5-22, Figure 8). At the time of the invention, it would have been obvious to one of ordinary skill in the art to modify the incubator for light microscopy of BAKER to include the laminate plate heater and frame as taught by KITAGAWA. The motivation would have been that KITAGAWA discloses the plate heater has a uniform distribution of temperature, increased thermal efficiency and reduced response time (Column 2, lines 54-61) and the laminate plate heater reduces manufacturing cost (Column 11, lines 27-29) while the frame allows the top plate and heater to be removable so they are used only when necessary (Column 10, lines 58-62).

b. With respect to claim 23, KITAGAWA teaches the top plate is rested on an inner flange (seat) of the frame (Column 10, lines 11-15).

c. With respect to claim 42, KITAGAWA teaches a sample heater for use in microscopes in which an embodiment includes a heater plate with a through-hole (light ray transmitting portion) that allows an objective lens of a microscope to be inserted into (corresponding to unit and lid) (Column 7, lines 65-66) in which a

culture container is placed on the heater plate (heating container from bottom) (Column 8, lines 1-2).

d. With respect to claim 47, BAKER does not explicitly disclose the incubator unit having a lid with slots for carrying out operations on the specimen within. However, KITAGAWA teaches the sample heater has a lid (4b) on top of the culture container (5) with a through hole for the lens of a microscope (10) located centrally (accommodating portion for specimen container) and a plurality of through holes (4d) (slots) with covers (11) for the entry of a reagent or insertion of a temperature sensor (operations carried out to the specimen) (Column 6, lines 45-57). KITAGAWA also teaches the lid is slidable (lid is adjusted to shift) on the upper edge of the wall in an airtight manner (closing the opening of the unit) (Column 6, lines 55-57). The sliding of the lid places the through holes in direct alignment with the sample container (See Figure 3). At the time of the invention, it would have been obvious to one of ordinary skill in the art to modify the incubator for light microscopy of BAKER to include the lid with through holes of KITAGAWA. The motivation would have been that KITAGAWA discloses the lid allows for the entry of reagents or temperature and humidity sensors while maintaining an airtight closure of the container (Column 6, lines 50-57).

e. With respect to claim 48, BAKER discloses a cover for the incubator comprising a cover plate (lid) with a viewing aperture centered above the culture dish (region of the accommodating portion) to allow the use of a high power objective lens while retaining the ability to focus on the cell culture (Column 4,

lines 37-34). BAKER does not explicitly disclose the aperture being covered with a cover plate that can be displaced. However, KITAGAWA teaches a lid for a sample heater with through holes which are open and closed by lids provided on the surface of the main lid (cover plate displaced relative to upper surface of lid) (Column 6, lines 48-52). At the time of the invention, it would have been obvious to one of ordinary skill in the art to modify the cover with an aperture in the incubator for light microscopy of BAKER to include the lids of KITAGAWA. The motivation would have been that KITAGAWA discloses the lid maintains an airtight closure of the container while still allowing the entry of necessary objects (Column 6, lines 50-57).

f. With respect to claim 27, BAKER teaches an upwardly extending cylindrical outer wall (12) on a base platform (11) with an observation hole (17) centrally of low inner wall (13) (at central portion) with a countersink (18) (container accommodating portion) that permits a conventional culture dish (19) (specimen container) (Column 3, lines 9-19, Figure 1). BAKER teaches moisture soaked annular pads (15, 16) (water reservoir, water tank) are located in the channel between the outer and inner walls surrounding the culture dish (Column 3, lines 14-16, Figure 1). BAKER also includes a transparent, cylindrical cover plate (25) (lid) that seals off the upper opening of the incubator (Column 3, lines 26-28, Figure 2). BAKER also teaches a thermal heating means (39) (heater) to provide suitable survival temperature in the incubator (Column 3, lines 57-68, Figure 1). The incubator of BAKER also includes a hollow fiber tube (30) (gas

pipe) connected to a supply tube (32) (gas supply tube) that is connected externally to a supply hose (33) to feed gases into the incubator (Column 3, lines 36-47, Figure 1). The observation hole (17) (light transmitting portion of unit) located in the center of bottom platform (11) and the transparent cover plate (25) (light transmitting portion of lid) allow continuous observation of cell cultures using either an upright or inverted microscope (transmitting light rays upwardly or downwardly) (Column 2, lines 17-23). BAKER teaches an observation hole located in the center of bottom platform and a transparent (light ray transmitting) cover plate (lid) allow continuous observation of cell cultures using either an upright or inverted microscope (Column 2, lines 17-23). BAKER does not explicitly disclose the unit adapted to be placed on the stage without contacting the heater. However, KITAGAWA teaches an embodiment of a sample heater for use in a microscope with a container that has an annular projection on the bottom (Column 12, lines 57-65). KITAGAWA shows the annular projection on the culture container prevents it from directly contacting the heater below (not to contact the plate heater) and interposes a plate seat between the heating plate and container (spacing between) (Figure 23). KITAGAWA further discloses that the container is mounted through the plate seat on the upper surface of the heater plate with the plate seat fit in the annular projection of the container (unit and heater are separable) (Column 12, lines 11-15). At the time of the invention, it would have been obvious to one of ordinary skill in the art to modify the incubator for light microscopy of BAKER to include the plate heater not directly in

contact with the culture container as taught by KITAGAWA because the spacing from the heater allows for a uniform distribution of temperature, increased thermal efficiency and reduced response time (Column 2, lines 54-61).

g. With respect to claim 28, the limitations of claim 27 are met by the above combination of BAKER and KITAGAWA. Additionally BAKER teaches providing the base with an outward extending portion (28) with holes (29) (fixtures) to provide means for fastening the incubator onto (on upper surface) suitable observation means (microscope stage) (Column 3, lines 31-35).

h. With respect to claim 37, the limitations of claims 27 and 28 are considered met by the above combination of BAKER and KITAGAWA. Additionally BAKER discloses a clip (centering member) biased toward the culture dish to hold it firmly in place in the countersink (tool fitting hole) to maintain optical alignment of the culture cells (center unit in hole) (Column 4, lines 8-12). BAKER also discloses portion of the platform extending outward (around the peripheral portion of the unit) which have holes to provide a means for fastening (in contact with fixtures) the incubator to the stage (Column 3, lines 31-35).

6. Claim 46 is rejected under 35 U.S.C. 103(a) as being unpatentable over BAKER (US 4301252) in view of KITAGAWA (US 4629862) as applied to claims 22, 23, 27-29, 37, 42, 47, and 48 above, and further in view of KURESHY (US 5192506).

a. With respect to claim 46, BAKER and KITAGAWA do not disclose the incubator having an entrance opening in the side wall with a closure member for closing and opening the entrance. However, KURESHY teaches an incubator port closure system that provides a door or shutter (side closure member) for closing or blocking the injection port (entrance opening) in the outer wall of the incubator (wall of the unit) for the insertion and removal of assay cartridges (Column 12, lines 60-68). At the time of the invention, it would have been obvious to one of ordinary skill in the art to modify the incubator of BAKER and KITAGAWA to include the incubator door with closure of KURESHY. The motivation would have been that KURESHY discloses that it would be desirable to block the port when the cartridges are not being inserted or extracted from the incubator as the port permits air flow between the inside and outside of the incubator and causes undesirable variation in the chamber temperature (Column 2, lines 42-48).

7. Claim 53 is rejected under 35 U.S.C. 103(a) as being unpatentable over BAKER (US 4301252) in view of KITAGAWA (US 4629862) as applied to claims 22, 23, 27-29, 37, 42, 47, and 48 above, and further in view of KURESHY (US 5192506) as applied to claims 31 and 46 above, and further in view of CHAN (US (US 6056342).

a. With respect to claim 53, BAKER, KITAGAWA, and KURESHY do not explicitly disclose tongs for use with the incubator. However, CHAN discloses multi-purpose tongs with a U shaped handle (connected at rear ends), two gripper arms crossed in the middle, two holding members (urging portions) and anti-slide abutments

(pinching portions) between the crossed arms and the holding members to prevent further movement of the arms (Column 3, lines 26-40). The tongs are opened by a user pinching the handle inwards (elastically deformable material) causing the holding members to separate. At the time of the invention, it would have been obvious to one of ordinary skill in the art to modify the incubator of BAKER, KITAGAWA, and KURESHY to include the tongs of CHAN. The motivation would have been that CHAN discloses the tongs are of efficient and low cost construction and versatile for use holding small articles and are easily cleanable (Column 2, lines 17-25).

8. Claims 41 and 43-44 are rejected under 35 U.S.C. 103(a) as being unpatentable over BAKER (US 4301252) in view of KITAGAWA (US 4629862) as applied to claims 22, 23, 27-29, 37, 42, 47, and 48 above, and further in view of DILLER (US 5257128).

a. With respect to claim 41, BAKER and KITAGAWA do not explicitly disclose a means for supplying water into the reservoir. The means for language used in claim 20 invokes 35 U.S.C. 112 6th paragraph interpretation such that the means for consists of a pipe, supply tube, and infusion reservoir as stated in the specification (Page 15). However DILLER teaches a perfusion stage for a microscope in which the perfusion system supplies fluid such as water through a fluid inlet tube (supply tube) from a fluid reservoir (infusion reservoir) which is fed though an inlet (pipe). At the time of the invention, it would have been obvious to one of ordinary skill in the art to modify the incubator of BAKER and KITAGAWA

to include the perfusion system of DILLER. The motivation would have been that DILLER discloses the fluid system allows for serial perfusion of the specimen and rapid exchange of the bathing fluid with a low time constant while maintaining the specimen in focus of the microscopic field of view (Column 5, lines 30-35).

b. With respect to claim 43, BAKER and KITAGAWA do not explicitly disclose a nutrient medium supply means. The means for language used in claim 24 invokes 35 U.S.C. 112 6th paragraph interpretation such that the means for consists of a delivery tube, withdrawal tube, and media tank as stated in the specification (Page 14). However, DILLER teaches a perfusion stage for a microscope in which the perfusion system connected to the sample chamber (container) includes a fluid inlet tube (tube for delivery), a fluid outlet tube (tube for withdrawal), and a fluid reservoir (media tank) connected to the inlet tube (Column 12, lines 17-20). At the time of the invention, it would have been obvious to one of ordinary skill in the art to modify the incubator for light microscopy of BAKER and KITAGAWA to include the perfusion system of DILLER. The motivation would have been that DILLER discloses the fluid system allows for serial perfusion of the specimen and rapid exchange of the bathing medium with a low time constant while maintaining the specimen in focus of the microscopic field of view (Column 5, lines 30-35).

c. With respect to claim 44, BAKER and KITAGAWA do not explicitly disclose a nutrient supplying means that enables the replenishment of the nutrient medium without removing the lid of the unit. However, the perfusion stage for a

microscope shown by DILLER in Figure 2 and described above in modified BAKER, allows for the inlet of fluid (71) from a reservoir (82) to the sample chamber (14) without the removal of the cover (lid) (12).

9. Claim 50 is rejected under 35 U.S.C. 103(a) as being unpatentable over BAKER (US 4301252) in view of KITAGAWA (US 4629862) as applied to claims 22, 23, 27-29, 37, 42, 47, and 48 above, and further in view of DILLER (US 5257128) as applied to claims 41, and 43-44 above, and further in view of ARGENTIERI (US 5241415).

a. With respect to claim 50, the combination of BAKER, KITAGAWA, and DILLER does not explicitly disclose a heater with a heating portion formed of a transparent conductive film. However, ARGENTIERI discloses a heated recording chamber in which the preferable heater is a heating element consisting of a grid of wires embedded within a clear mylar film (transparent conductive film) (Column 3, lines 3-13). This heating element is then placed on the bottom of the tissue recording chamber (container-placing portion). At the time of the invention, it would have been obvious to one of ordinary skill in the art to modify the incubator of BAKER, KITAGAWA, and DILLER to include the clear mylar film encased heating element of ARGENTIERI. The motivation would have been that ARGENTIERI discloses the heating element below the tissue recording chamber keeps the temperature constant of the liquid bath in the chamber (Column 3, lines 1-4). ARGENTIERI also discloses that the wires of the heater are in a grid which provides transparent windows so that the tissue and cells in the chamber

are illuminated with the same intensity as if the wires of the heating element were not present (Column 3, lines 58-67).

10. Claim 45 is rejected under 35 U.S.C. 103(a) as being unpatentable over BAKER (US 4301252) in view of KITAGAWA (US 4629862) as applied to claims 22, 23, 27-29, 37, 42, 47, and 48 above, and further in view of FOCHT (US 5552321).

a. With respect to claim 45, BAKER discloses a clip to hold the culture dish in the countersink to maintain alignment of the culture cells (Column 4, lines 8-11). Baker and KITAGAWA do not explicitly disclose the use of a pair of holders across the central portion of the unit. However, FOCHT discloses a culture dish apparatus that has retaining tabs (Figure 1, #13) (container holders) that are pivoted or slideably (adjustable spacing) moved to hold the culture dish in the recess (container accommodating portion) located in the center of the stage insert (Figure 1, Column 3, lines 65-67). At the time of the invention, it would have been obvious to one of ordinary skill in the art to modify the incubator of BAKER and KITAGAWA to include the retaining tabs of FOCHT. The motivation would have been the retaining tabs lock the culture dish assembly into position to allow proper connection to the heating elements of the incubator as FOCHT discloses (Column 4, lines 1-12).

11. Claims 49 and 52 are rejected under 35 U.S.C. 103(a) as being unpatentable over BAKER (US 4301252) in view of KITAGAWA (US 4629862) as applied to claims

22, 23, 27-29, 37, 42, 47, and 48 above, and further in view of ARGENTIERI (US 5241415).

a. With respect to claim 49, BAKER and KITAGAWA do not explicitly disclose the bottom surface of the water tank is provided with a water tank heater. However, ARGENTIERI teaches a heated recording chamber in which a heater is adhered to the bottom of a serpentine passageway (water tank) to heat the liquid flowing into the cavity containing the cell or tissue sample (Column 3, lines 47-52). At the time of the invention, it would have been obvious to one of ordinary skill in the art to modify the incubator of BAKER and KITAGAWA to include the fluid heater of ARGENTIERI. The motivation would have been that ARGENTIERI discloses exposing the fluid to the heater allows the temperature of the liquid to reach and stabilize at the temperature required of the liquid bath in the cavity (Column 3, lines 52-56).

b. With respect to claim 52, BAKER discloses a clip to hold the culture dish in the countersink to maintain alignment of the culture cells (Column 4, lines 8-11). BAKER and KITAGAWA do not explicitly disclose the means for securing the specimen container to be the holders with screws as defined in the specification according to 35 U.S.C. 112 6$^{th}$ paragraph interpretation of the claim. However ARGENTIERI teaches a heated recording chamber where the tissue recording chamber (specimen container) is retained in position on a microscope stage through the use of clamps (holders) secured to the stage by knurled screws (Column 2, lines 40-49). At the time of the invention, it would have been obvious

to one of ordinary skill in the art to modify the incubator of BAKER and KITAGAWA to include the clamps and screws of ARGENTIERI. The motivation would have been that ARGENTIERI discloses the clamps allow relatively precise positioning of the chamber with respect to the objective lens which must be brought into close proximity to the sample or cell in the recording chamber (Column 2, lines 49-55). In addition, KITAGAWA teaches an embodiment of a heater plate which has a through-hole with a certain diameter because it allows the objective lens of a microscope to be inserted for observation of the culture container (Column 7, lines 60-68).

12. Claim 51 is rejected under 35 U.S.C. 103(a) as being unpatentable over BAKER (US 4301252) in view of KITAGAWA (US 4629862) as applied to claims 22, 23, 27-29, 37, 42, 47, and 48 above, and further in view of MIDDLEBROOK (US 5181382).

a. With respect to claim 51, BAKER discloses the incubator with a culture dish (body open) with an upper surface (lid) (Column 4, line 40). Neither BAKER nor KITAGAWA explicitly disclose a lid provided with connections for the tubes. However, MIDDLEBROOK teaches a stage assembly in which the upper plate (lid) has three holes (aperture for connecting tube, channel) that extend angularly downwardly and centrally inwardly into the specimen chamber (lower surface of lid) (Column 6, lines 53-60). These holes are then connected to perfusion tubing, aspiration tubing or a sensor (Column 6, lines 57-64). At the time of the invention, it would have been obvious to one of ordinary skill in the art to modify the

incubator of BAKER and KITAGAWA to include the lid with tube connections of MIDDLEBROOK. The motivation would have been that the system of MIDDLEBROOK does not require bulky positioning devices that compete for available space on the microscope stage (Column 1 line 66- Column 2 line 4).

13. Claim 36 is rejected under 35 U.S.C. 103(a) as being unpatentable over BAKER (US 4301252) in view of KITAGAWA (US 4629862) as applied to claims 22, 23, 27-29, 37, 42, 47, and 48 above, and further in view of INOUE (US 5717190)

a. With respect to claim 36, BAKER teaches an upwardly extending cylindrical outer wall (12) on a base platform (11) with an observation hole (17) centrally of low inner wall (13) (at central portion) with a countersink (18) (container accommodating portion) that permits a conventional culture dish (19) (specimen container) (Column 3, lines 9-19, Figure 1). BAKER teaches moisture soaked annular pads (15, 16) (water reservoir, water tank) are located in the channel between the outer and inner walls surrounding the culture dish (Column 3, lines 14-16, Figure 1). The incubator taught by BAKER also includes a transparent, cylindrical cover plate (25) (lid) that seals off the upper opening of the incubator (Column 3, lines 26-28, Figure 2). BAKER also teaches a thermal heating means (39) (heater) to provide suitable survival temperature in the incubator (Column 3, lines 57-68, Figure 1). The incubator of BAKER also includes a hollow fiber tube (30) (gas pipe) connected to a supply tube (32) (gas supply tube) that is connected externally to a supply hose (33) to feed gases into the incubator

(Column 3, lines 36-47, Figure 1). The observation hole (17) (light transmitting portion of unit) located in the center of bottom platform (11) and the transparent cover plate (25) (light transmitting portion of lid) allow continuous observation of cell cultures using either an upright or inverted microscope (transmitting light rays upwardly or downwardly) (Column 2, lines 17-23). BAKER teaches an observation hole located in the center of bottom platform and a transparent (light ray transmitting) cover plate (lid) allow continuous observation of cell cultures using either an upright or inverted microscope (Column 2, lines 17-23). BAKER does not explicitly disclose the lid having a heating portion. However, KITAGAWA discloses a sample heater for use in microscopes in which the container is heated from two opposite sides, including a sheet heater on the top (lid of incubator) of the culture container (Column 11, line 67- Column 12, line 3). At the time of the invention, it would have been obvious to one of ordinary skill in the art to modify the incubator of BAKER to include the lid heater as taught by KITAGAWA because the addition of a heater on the top plate allows for the container to be rapidly heated preventing the formation of water drops on the upper inner plate of the container which reduce visibility in the container (Column 12, lines 1-10). The combination of BAKER and KITAGAWA does not explicitly disclose the lid heater to have a conductive film layer disposed between glass plates. However, INOUE teaches a transparent heater for microscopes which has a laminate structure including a transparent conductive film layer disposed between transparent glass plates (Column 12, line 22 – Column 13, line 16). At

the time of the invention it would have been obvious to modify the lid heater of BAKER and KITAGAWA to include the laminate structure with glass plates as taught by INOUE because it can heat the vicinity of the center of the heater used for examination at a uniform temperature without needing a through hole (Column 2, lines 16-22) and the glass plates have high transparency and low heat conductivity (Column 12, lines 63-64).

***Response to Arguments***

14. Applicant's arguments filed 5/8/2009 have been fully considered but they are not persuasive.

15. In response to applicant's argument with respect to claim 22 on page 9, that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., that the sheet heater of KITAGAWA is not isolated from the inter-seat (top plate)) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Therefore the examiner maintains that KITAGAWA does teach a space between the inter-seat (top plate) and the upper side of the plate heater (upper plate) as can be seen in Figure 8 where a space can clearly be seen between the top of the plate heater 81 and the inter-seat 80 (below the culture container) as required by the limitations of claim 22.

16. In response to Applicant's argument regarding claim 27 on page 10, that KITAGAWA does not suggest the unit placed on the stage so as not to contact the heater with a space between, it is noted that Applicant relies on KITAGAWA's teaching in Figure 1 in their arguments. However, the examiner relied on a different embodiment of KITAGAWA shown in Figure 23 where the culture container has projections that form a space from the heater (Column 14, lines 1-4) as explained in the above rejection of claim 27. Therefore the examiner maintains the rejection as it is noted that Applicant's present no clear arguments why the cited portion of the reference does not teach this feature.

17. In response to applicant's arguments regarding claim 36 on page 11, against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). Applicant's argues that INOUE fails to teach the heating plate includes a lid, however the examiner relied on the sheet heater on top of the culture container (Column 11, line 67-Column 12, line 3) of KITAGAWA to teach this limitation because it allows for the container to be rapidly heated while preventing the formation of water drops on the upper inner plate of the container which would reduce visibility in the container (Column 12, lines 1-10). The examiner maintains that INOUE was relied on to teach the construction of the heater being transparent so as to allow for heating to a uniform temperature in an area that is used for viewing the specimen as the top of the culture container would be (Column 2, lines 16-22).

***Conclusion***

18. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DANIELLE HENKEL whose telephone number is (571)270-5505. The examiner can normally be reached on Mon-Thur: 11am-8pm, Alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Marcheschi can be reached on 571-272-1374. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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/DANIELLE HENKEL/
Examiner, Art Unit 1797

/William H. Beisner/
Primary Examiner, Art Unit 1797